***COMPLETE IN NOTEBOOK! COPY ALL FIGURES!***

CW54/HW54: Similar Triangles Plane Geometry

**Geometry  
Due: Wednesday, January 25th**

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| FAILURE TO WRITE IN COMPELTE SENTENCES OR SHOW ALL WORK WILL RESULT IN LASALLE | |
| 1. a) In your own words describe: **similarity** and **congruence.**  b) How is similarity different than congruence? | |
| 1. ../../../../../Desktop/Similar%20Triangles%20W%20numbers.pngCopy the triangles and table below into your notebook. Complete the table.  |  |  |  | | --- | --- | --- | | Measure of side (*ΔABC*) | Measure of side (*ΔDEF*) | Ratio | | *AB =* | *DE =* |  | | *BC =* | *EF =* |  | | *CA =* | *FD =* |  | | |
| 1. Based on what you see above, define a **ratio** and **proportion**. | |
| Directions: Use the given **scale factor** to find and label all the sides of each triangle. | |
| 1. Scale factor from ABC to DEF is 1/3  |  |  | | --- | --- | | *AB = 3* | *DE=* | | *BC = 7* | *EF=* | | *CA = 7* | *FD =* | | 1. Scale factor from ABC to DEF is 2  |  |  | | --- | --- | | *AB = 3* | *DE=* | | *BC = 5* | *EF=* | | *CA = 7* | *FD =* | |
| 1. Scale factor from ABC to DEF is ½  |  |  | | --- | --- | | *AB = 10* | *DE=* | | *BC = 4* | *EF=* | | *CA = 10* | *FD =* | | 1. Scale factor from DEF to ABC is 5.  |  |  | | --- | --- | | *AB = 15* | *DE=* | | *BC = 5* | *EF=* | | *CA = 20* | *FD =* | |

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| Directions: State if the triangles are similar or not. Show work to support your answer. | |
| 1. ../../../../../Desktop/Screen%20Shot%202015-12-06%20at%205.16.48%20PM | 1. ../../../../../Desktop/Screen%20Shot%202015-12-06%20at%205.16.55%20PM |
| 1. ../../../../../Desktop/Screen%20Shot%202015-12-06%20at%205.17.06%20PM | 1. ../../../../../Desktop/Screen%20Shot%202015-12-06%20at%205.17.14%20PM |
| 1. ../../../../../Desktop/Screen%20Shot%202015-12-06%20at%205.17.19%20PM | 1. ../../../../../Desktop/Screen%20Shot%202015-12-06%20at%205.23.15%20PM |